GOLDEN DAWN CORRESPONDENCE COURSE

LESSON 137

THE TATTWAS: THEIR INFLUENCE ON HUMAN LIFE AND DESTINY

THE TATTWAS

The Tattwas are the five modifications of the Great Breath. Acting upon Prakriti, this Great Breath projects it into five states, each having distinctive vibratory motion and performing different functions. The first outcome of the evolutionary state of Parabrahman is the Akasha Tattwa. Following this Tattwa, the other four occur in the order of: Vayu, Tejas, Apas, and Prithivi. They are also referred to as Mahabhutas, this name being a synonym of the word Tattwa.

The word Akasha is generally translated into English, giving the word "Ether". Unfortunately, to modern English science sound is not known to be the distinguishing quality of the ether. Some few might also hold to the idea that the modern medium which transports light is the same as the Akasha. This, I believe, is a mistake. The luminiferous ether is the subtle Tejas Tattwa, and not the Akasha. All of the five subtle Tattwas might be called ethers no doubt, but to use the term ether for Akasha, without any distinguishing epithet, is misleading. In consequence, we might call the Akasha the sonoriferous ether, the Vayu the tangiferous ether, Apas the gustiferous ether, and Prithivi the odoriferous ether. Just as there exists in the Universe a luminiferous ether (by definition, an element of refined matter without which it has been found that the phenomena of light finds no adequate explanation), so do the four remaining ethers exist; elements of refined matter without which no adequate explanation will be found to account for the phenomena of sound, touch, taste, and smell.

The luminiferous ether is supposed by modern science to be matter in a most refined state (Again, see previous Editor's Note in Lesson 136 concerning the modern views of Physics relative to the existence of an ether. Ed. Note). It is the vibrations of this element that are suppose to constitute the phenomena of light. Accordingly, the vibrations take place at right angles to the direction of the wave. The same description corresponds closely to that given the Tejas Tattwa in this book. It therefore makes this Tattwa move in an upward direction, the center of the direction being the direction of the wave. In addition, it states that one complete vibration of this element produces the figure of a triangle. See figure 1.

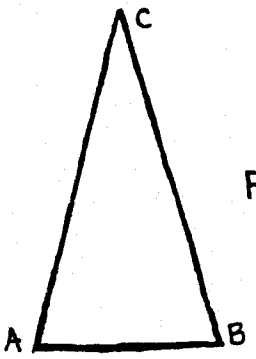

Figure 1

Referring to Figure 1, we see line AB is the direction of the wave; line BC is the direction of the vibration, and line CA is that line along which the vibrating atom must return to its original position on line AB.

The Tejas Tattwa of the ancients is then exactly the luminiferous ether of the moderns, as far as the nature of the vibration is concerned. There are no concepts however concerning the remaining four ethers in modern science. The vibrations of Akasha, the sonoriferous ether,

constitute sound; and it is necessary to recognize the distinctive character of this form of motion.

The experiment of a bell placed in a vacuum illustrates that the vibrations of the atmosphere (air) are responsible for the propagation of sound. It is also known that other medias, such as the Earth and metals, transmit sound in varying degrees as well. There must therefore, be some one thing present in all these substances which gives birth to sound: i.e., that vibration which constitutes sound. That something is considered here to be the Indian Akasha.

But the Akasha is all-pervading, as is the luminiferous ether; this being so, then why isn't sound transmitted to our ears when a vacuum is produced in a bell jar, and a bell vibrated within that vacuum environment? The fact is that we must make a difference between the vibrations of the elements which constitute sound and light and the vibrations of the media which transmit these impressions to our senses. It is not the vibrations of the ethers i.e., the subtle Tattwas, that cause our perceptions: rather it is the ethereal vibrations transferred to different media, which are so many modifications of gross matter, i.e., the Sthula Mahabhutas. In connection with this, we find the luminiferous ether is present as much in a darkened room as in the space without; the minutest space within the dimensions of the surronding walls is pregnant with it. For all this, the luminosity of the exterior is not present in the interior. Why? The reason is that our ordinary vision does not see the vibrations of the luminiferous ether. It sees only the vibrations of the media which the ether pervades, different

media having different capabilities of being set into etheral vibrations. In the space outside of the darkened room, the ether brings the atoms of the atmosphere (air) into the necessary state of visual vibration, with one wide expanse of light being presented to our view. The same is the case with every other object that we see: the ether which pervades the object brings the atoms of that object into the necessary state of visual vibration. The strength of the ethereal vibrations which the presence of the Sun imparts to the ether pervading our planet is not sufficient to evoke the same state in the dead matter of the darkening walls: the internal ether, divided from the external one by this dead mass, is itself cut off from such vibrations. The darkness of the room is thus the consequence, notwithstanding the presence therein of the luminiferous ether. The light from an electric spark generated in the vacuum of a bell-jar needs to be transmitted to our eyes, because the glass of the jar which is in contact with the internal luminiferous ether has a certain degree of capability of being put into the state of visual vibration; from here it is transmitted to the external ether, and then to the eye of the observer. The same however, would not be the case if we were to use a porcelain or earthen jar. It is this capability of being put into the state of visual vibration which results in the condition of transparency, as exhibited by glass and similiar objects.

To return now to the sonoriferous ether (Akasha). Every form of gross matter possesses what we call auditory transparency. This quality varies with the varying form of the matter in question. As to the nature of

vibrations, two things must be understood. In the first place, the external form of the vibration is similar to the hole of the ear, a simple illustration of which is given in Figure 2.

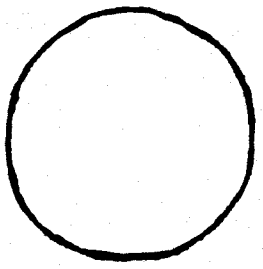

Figure 2

It throws matter which is subject to it into the form as of a dotted sheet. These dots are small points, rising above the common surface, thus producing microcosmic pits in the sheet. See Figure 3

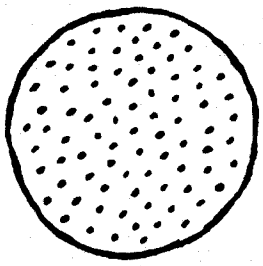

Figure 3

This construct is said to move by "fits" and "starts" (Sankrama), and to move in all directions (Sarvatogama). That means that the impulse falls back upon itself along the line of its former path, which lies on all sides of the direction of the wave. See Figure 4.

Figure 4

It should be understood that these ethers produce vibrations similar to their own in gross media. The form therefore, into which the auditory vibrations throw the atmosphere (air) is a true clue to the form of the ethereal vibration; the vibrations of air discovered by modern science being a close corollary.

We now come to consider the tangiferous ether (Vayu). The vibrations of this ether are described as being spherical in form, with its motion forming acute angles to the wave (Tiryak). Such is the representation of these vibrations on the plane of the paper. See Figure 5. It is worth noting, that the remarks about the transmission of sound in the case of the Akasha apply here too: specifically, mutatis mutandis.

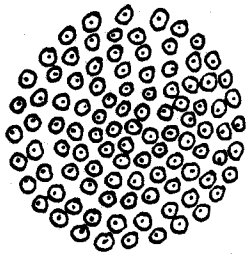

Figure 5

The gustiferous ether (Apas Tattwa) is said to resemble the half-moon in shape. Moreover it is said to move downward, this direction being opposite to that of the luminiferous ether; as such, it causes contraction. The representation of this Apas vibration on the plane of the paper is given in Figure 6.

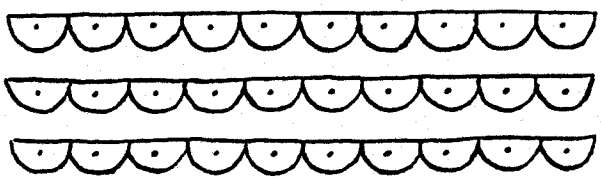

Figure 6

The process of contraction will be considered during our investigations of the qualities of the Tattwas.

The odoriferous ether (Prithivi) is given as having a quadrangular in shape as shown in Figure 7.

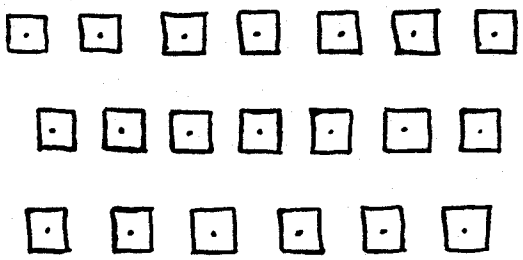

Figure 7

This structure is said to move in the middle. In other words, it moves neither at right angles nor at acute angles; neither upward nor downward. Rather, it moves along the line of the wave, the line and the quadrangle being in the same plane.

These are the forms and modes of motion of the five ethers. Of the five sensations of men, each of these ethers gives birth to one of these senses. The associations are as follows:

TATTWA NAME	ETHERIC NAME	PHYSICAL SENSE
Akasha	Sonoliferous Ether	Sound
Vaya	Tangiferous Ether	Touch
Tejas	Luminiferous Ether	Color (Sight)
Apas	Gustiferous Ether	Taste
Prithivi	Odoriferous Ether	Smell

In the process of evolution, these coexisting ethers, while retaining their general relative forms and primary qualities, contracted the qualities of the other Tattwas. This is known as the process of Panchikarana, or Division into Five.

If we take H, P, R, V, and L to be the Algebraic symbol for (1), (2), (3), (4), and (5) respectively, the ethers after Panchikarana assume the following forms:

(1) H = H/2 + P/8 + R/8 + V/8 + L/8

(2) P = P/2 + H/8 + R/8 + V/8 + L/8

(3) R = R/2 + H/8 + P/8 + V/8 + L/8

(4) V = V/2 + R/8 + H/8 + P/8 + L/8

(5) L = L/2 + V/8 + R/8 + H/8 + P/8

One molecule of each ether, consisting of eight atoms, has four of the original principal ethers, and one each of the remaining four.

The following table shows the five qualities of each of the Tattwas after Panchikarana.

	SOUND	TOUCH	TASTE	COLOR	SMELL
(1) H	Ordinary	.....	.....	.....	.....
(2) P	Very light	Cool	Acid	Blue of sky	Acid
(3) R	Light	Very hot	Hot	Red	Hot
(4) V	Heavy	Cool	Astringent	White	Astringent
(5) L	Deep	Hot	Sweet	Yellow	Sweet

It might be remarked here that the subtle Tattwas exist now in the Universe on four planes, the higher of which differ from the lower in their frequency, i.e., the number of vibrations per second. The four planes are:

1. Physiological.....Prana
2. Mental.....Manas
3. Psychic.....Vijnana
4. Spiritual.....Ananda

Now we will discuss some of the secondary qualities of the Tattwas.

1. SPACE. This is a quality of the Akasha Tattwa. It has been asserted that the vibration of this ether presents a shape like the hole in the ear, and that in the body thereof are microscopic points (Vindus). It follows that the interstices between the points serve to give space to ethereal minima, while offering them room for locomotion (Avakasha).

2. **LOCOMOTION.** This is the quality of the Vayu Tattwa. Vayu is a form of motion itself, as motion in all directions constitutes circular motion. Vayu itself has the form of spherical motion which, when added to by the motion that maintains the form of the different ethers, produces the stereotyped motion of Vayu: locomation being the result.

3. **EXPANSION .** This is the quality of the Tejas Tattwa. This follows from the shape and form of motion which is given to this ethereal vibration. See Figure 8.

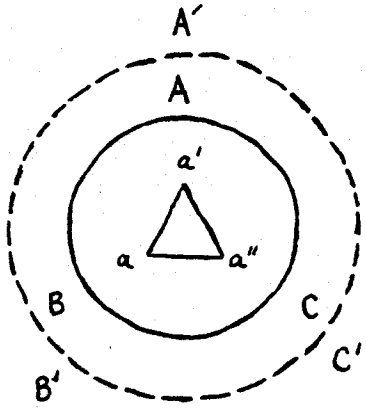

Figure 8

In the above figure, suppose A B C is a lump of metal. If we apply a brand of fire to it, the luminiferous ether in it is set into motion; this drives the gross atoms of the lump into similar motion. Now, suppose a is an atom. This being impelled to assume the shape of Tejas, the vibration radiates toward a′, and then takes the symmetrical position of a′′. In a similar fashion, every point changes its place around the center of the piece of metal. Ultimately, the whole piece assumes the shape

given by A′ B′ C′ in the Figure. Therefore, the result is expansion.

4. CONTRACTION. This is the quality of the Apas Tattwa. As has been remarked previously, the direction of this ether is the reverse of the Agni, and it s therefore easy to understand that contraction is the result of the action of this Tattwa.

5. COHESIVE RESISTANCE. This is the quality of the Prithive Tattwa. It is the reverse of the Akasha Tattwa, as the Akasha provides room for locomotion, while the Prithivi resists it. This is the natural result of the direction and shape of this vibration, as it covers up the spaces of the Akasha.

6. SMOOTHNESS. This is a quality of the Apas Tattwa. As the atoms of a body undergoing contraction approach each other and assume the semi-lunar shape of the Apas Tattwa, they must easily glide over each other. The very shape secures easy motion for the atoms.

The previously given ideas and concepts should be sufficient to explain the general nature of the Tattwas. The different phases of their manifestations on all the different planes of Life will be undertaken in their proper places.

THE GOLDEN DAWN CORRESPONDENCE COURSE

LESSON 138

THE TATTWAS AND EVOLUTION

It will be very interesting to trace the formation of the world and the development of Man according to the Theory of the Tattwas.

As we have seen, the Tattwas are modifications of Svara. Regarding Svara, we find written in our book:

"In the Svara are the Vedas and the Shastras, and in the Svara is music. All the world is in the Svara; Svara is the spirit itself."

The proper translation of the word 'Svara' is, "the current of the Life-Wave". It is the wave motion which is the cause of the evolution of cosmic undifferentiated matter into the differentiated Universe, and the the involution of this into the primary state of non-differentiation which continues eternally. Where does this motion come from? This motion is taken to be the Spirit itself. The word Atma used in the book carries the idea of eternal motion, being derived from the root at, meaning "eternal motion". It may also be remarked that the root at is related to another root, ah, meaning "breath", and to still another root, as, meaning "being". All these root words have for their origin the sound produced by the breath of animals. In the Science of Breath, the technical symbol for inspiration (inhalation) is sa; and for expiration (exhalation), the symbol is ha. As such, it is easy to see how these symbols are connected with the roots as and ah. The current of the Life-Wave spoken of earlier is technically called Hansachasa, i.e., the motion of ha and sa. The word Hansa, which is taken to mean God, is only a symbolic representation of the two eternal processes of Life: ha and sa. The primeval current of the Life-Wave

is then the same which, in Man, assumes the form of the inhalation and exhalation motion of the lungs: this is the all-prevading source of the evolution and involution of the Universe.

The book goes on to give the following:

"It is the Svara that has given form to the first accumulations of the divisions of the Universe; the Svara causes involution and evolution; the Svara is God Himself, or more properly, the Great Power (Maheshvara)."

The Svara is the manifestation of the impression on matter of that Power which in Man is known to us as the Power which knows Itself. It is to be understood that the action of this Power never ceases: it is ever working, and evolution and involution are the very necessary products of its unchangeable existence.

The Svara has two different states: the one is known on the physical plane of Life as the Sun-Breath, and the other as the Moon-Breath. At this stage however, they will simply be designated as positive and negative respectively. The period during which this current comes back to the point at which it began is known as the day and night of Parabrahman. The positive or evolutionary period is known as the day of Parabrahman, while the negative or involutionary period is called the night of Parabrahman. These days and nights follow each other without break. The sub-divisions of this period encompass all the phases of existence, and so it is necessary to give here the scale of time

according to the Hindu Shastras. We will begin with a Truti as the least division of time.

THE DIVISIONS OF TIME

26 2/3 Trutis = 1 Nimesha = 8/45 second.

18 Nimeshas = 1 Kashtha = 3 1/5 seconds = 8 Vipalas.

30 Kashtha = 1 Kala = 1 3/5 minutes = 4 Palas.

30 Kala = 1 Mahurta = 48 minutes = 2 Gharis.

30 Mahurtas = 1 day and night = 24 hours = 60 Gharis.

30 days and nights and odd hours = 1 Pitrya day and night = 1 month and odd hours.

12 months = 1 Daiva day and night = 1 year = 365 days, 5 hours, 30 minutes, 31 seconds.

365 Daiva days and nights = 1 Daiva year.

4,800 Daiva years = 1 Satya Yuga.

3,600 Daiva years = 1 Treta Yuga.

2,400 Daiva years = 1 Dvapara Yuga.

1,200 Daiva years = 1 Kali Yuga.

12,000 Daiva years = 1 Chatur Yuga (four Yugas).

12,000 Chatur Yugas = 1 Daiva Yuga.

2,000 Daiva Yugas = 1 day and night of Brahma.

365 Brahmic days and nights = 1 year of Brahma.

71 Daiva Yugas = 1 Manvantara.

12,000 Brahmic years = 1 Chatur Yuga of Brahma and so on.

200 Yugas of Brahma = 1 day and night of Parabrahman.

These days and nights follow each other in eternal succession, and hence eternal evolution and involution. We thus have five sets of days and nights:

1. Parabrahmic
2. Brahmic
3. Daiva
4. Pitrya
5. Manusha

A sixth is the Manvantaric day, and the Manvantaric night (Pralaya).

The days and nights of Parabrahman follow each other without beginning or end. The night (the negative period) and the day (the positive period) both merge into the Sushumna (the conjunctive period) and emerge into the other; so do the other days and nights. The days all through this division are sacred to the positive, the hotter current; the nights are sacred to the negative, the cooler current. The impressions of names, forms, and the power of producing an impression lie in the positive phase of existence; receptivity is given birth to by the negative current.

After being subjected to the negative phase of Parabrahman, Prakriti, which follows Parabraham, has been saturated with evolutionary receptivity; as the hotter current sets in, changes are imprinted upon it, and it appears in changed forms. The first imprint which the evolutionary positive current leaves upon Prakriti is known as Akasha. Then, by and by, the remaining ethers come into existence. These modifications of Prakriti are the ethers of the first stage.

Into these five ethers (which now constitute the objective plane of existence), works the current of the Great Breath. A further development takes place: different centers come into existence, with the Akasha throwing them into a form which gives room for locomation. With the beginning of the Vayu Tattwa, these elementary ethers are thrown into the form of spheres. This was the beginning of formation, or what may also be called solidification.

These spheres are called our Brahmandas. In them the ethers assume a secondary development: the so-called division into five occurrs. But in this Brahmic sphere in which the new ethers have ample room for locomotion, the Tejas Tattwa first comes into play followed by the Apas Tattwa. Every Tattwic quality is generated into, and preserved in these spheres by these currents. With the Apas Tattwa, the formation is complete. In the process of time we have a center and an atmosphere: this sphere is the self-conscious universe. Likewise, in this sphere a third ethereal state comes into existence according to the same process. In the cooler atmosphere removed from the center, another class of centers comes into existence. These divide the Brahmic state of matter into two different states. Following this, still another state of matter comes into existence, their centers bearing the name of Devas, or suns.

Thus, we have four states of subtle matter in the Universe:

1. Prana: the Life Matter, with the Sun for the center.
2. Manas: the Mental Matter, with Manu for the center.
3. Vijnana: the Psychic Matter, with Brahma for the center.
4. Ananda : the Spiritual Matter, with Parabrahman as the infinite substratum.

Every higher state is positive with regard to the lower one, and every lower one is given birth by a composition of the positive and negative phases of the higher. According to this scheme, we have the following:

1. Prana deals with three sets of days and nights as given in the following division of time:

(a) Our ordinary days and nights.

(b) The bright and dark half of the month which are called the Pitrya day and night.

(c) The northern and southern halves of the year: the day and night of the Devas.

These three nights acting upon Earth-Matter impart to it the receptivity of the cool, negative, shady phase of Life-Matter. The respective days coming in after these nights, imprint themselves upon it. The Earth has thus become a living being, having a North Pole in which a central force draws a compass needle towards it, and a South Pole in which is centered a force we will call 'the shade of the North Pole Center.' Likewise, it is also considered to have the Solar Force centered in its Eastern half,

and the Lunar Force (the 'shade' of the former), centered in the Western half.

These centers come into existence even before the Earth is manifested on the gross plane, as do the centers of the other planets. As the Sun presents itself to the Manu, there comes into existence two states of matter in which the Sun lives and moves: the positive and negative. As the Solar Prana (after having been subjected to the negative, shady state), is exposed in its course of revolution to the source of its positive phase, i.e., that of Manu, the figure of Manu is imprinted upon it. This Manu is the Universal Mind, and all the planets with their inhabitants are the phases of its existence. Although we will explore this facet of our discussion later, at present let us content ourselves with the Earth-Life or Terrestrial Prana as having four centers of force.

The positive phase, acting upon it after it has been cooled by the negative current, imprints itself upon it, and Earth-Life comes into existence in various forms. The essays on Prana will explain this more clearly.

2. Manas deals with Manu. The suns revolve around these centers, complete with the whole of their atmosphere of Prana. This system gives birth to the Lokas, or Spheres of Life, of which the planets are one class. These Lokas have been enumerated by Vyasa in his commentary on the Yogashastra (Pada iii. Sutra 26). The aphorism reads as follows:

"By meditation upon the Sun is obtained a knowledge of the physical creation." On this the commentator elaborates: " There are seven Lokas (Spheres of Existence)".

1. Bhurloka extends to the Meru.
2. Antarikshaloka extends from the surface of the Meru to the Dhruva, the Pole Star, and contains the planets, the Nakshatras, and the stars.
3. Svarloka lies beyond: it is five-fold, and sacred to the Mahendra.
4. Maharloka, sacred to Prajapati.
5. Janaloka, sacred to Brahma.
6. Taparloka, sacred to Brahma.
7. Satyaloka, sacred to Brahma.

It is not my purpose to to try to explain the meaning of these Lokas. It is sufficient to say that the planets, stars, and the Lunar Mansions are all impressions of Manu, just as the organisms of the Earth are impressions of the Sun. The Solar Prana is prepared for this impression during the Manvantaric night.

Similarly, Vijnana deals with the nights and days of Brahma, and Ananda with those of Parabrahman. It will thus be seen that the whole process of creation, on whatever plane of life, is performed naturally by the five Tattwas in their double modification, the positive and negative. There is nothing in the Universe which the Universal Tattwic Law of Breath does not comprehend.

After this very brief exposition of the theory of Tattwic Evolution comes a series of essays, taking up all the subtle states of matter,

one-by-one. The working of the Tattwic Law in those planes, and the manifestations of these planes of life in Humanity are described in more detail.

GOLDEN DAWN CORRESPONDENCE COURSE

LESSON 139

THE MUTUAL RELATION OF THE TATTWAS AND OF THE PRINCIPLE

The Akasha is the most important of all the Tattwas. It must precede and follow every change of state on every plane of life. Without this, there can be no manifestation or cessation of form. Every form proceeds from, and lives in, Akasha. Hence, the Akasha is full of forms in their potential state. It intervenes between every two of the five Tattwas, and between every two of the five Principles.

The evolution of the Tattwas is always part of the evolution of a certain, definite form. Thus, the manifestation of the primary Tattwas is with the definite aim of giving what we may call a body, a prakritic form, to the Ishvara. In the bosom of the Infinite Parabrahman there are hidden innumerable such centers. One center takes under its influence a certain portion of the infinite, and there we find coming into existence first, the Akasha Tattwa. The extent of this Akasha limits the extent of the Universe, and out of it the Ishvara is to come. To this end, out of this Akasha, comes the Vayu Tattwa. It is this Vayu which pervades the whole Universe: it has a certain center which serves to keep the whole expanse together, and as one whole separate from other Universes (Brahmandas).

It has been stated that every Tattwa has a positive and negative phase. Using the analogy that places more distant from the Sun's center are always negative as compared to those closer to this center, we might say that the former are cooler than the latter. It will also be seen further on, that the property of heat is not peculiar solely to the Sun; rather,

all the higher centers have a greater amount of heat than even the Sun itself.

In this Brahmic Sphere of Vayu (except for some space near the Parabrahmic Akasha), every atom of the Vayu is reacted upon by an opposite force. The more distant (and therefore cooler) one reacts upon the nearer (and therefore hotter) one. The equal and opposite vibrations of the same force cancel each other, and pass together into the Akashic state. Thus, while some of this space remains filled up by the Brahmic Vayu (due to the constant outflow of this Tattwa from the Parabrahmic Akasha), the remainder is rapidly turned into Akasha. This Akasha is the mother of the Brahmic Agni Tattwa. The Agni Tattwa working in a similar fashion gives birth to Apas through another Akasha, as is also the case with the Prithivi Tattwa. This Brahmic Prithivi contains the qualities of all the preceding Tattwas, in addition to a fifth one of its own.

The first state of the Universe, the Ocean of Psychic Matter, has now come into existence in its entirety. This matter is extremely fine, and lacks any grossness as compared to the matter of the fifth plane. In this ocean shines the intelligence of Ishvara. It is in this ocean, with everything that might be manifest in it, which is the self-conscious Universe.

In this psychic ocean, the more distant atoms are negative as compared to the nearer ones. Hence, except for a certain space which remains filled with the psychic Prithivi, the rest begins to change into an Akasha. This second Akasha is full of what are called Manus in their

potential state. (The Manus are so many groups of certain mental forms; the ideas of the various genera and species of life yet to appear. We have to do with one of these.)

Impelled by the evolutionary current of the Great Breath, Manu comes out of this Akasha, in the same way Brahma came out of the Parabrahamic Akasha. First and uppermost in the Mental Sphere is the Vayu; then in regular order occurrs the Tejas, the Apas, and the Prithivi. This mental matter follows the same laws, and similarly begins to pass into the third Akashic state which contains innumerable suns. They come out in the same way, and begin to work on a similar plan which will be better understood here than higher up. Everybody here can test for himself that the more distant portions of the solar system are cooler than the nearer ones. Every atom of Prana is comparatively cooler than the next one which is closer to the Sun. Hence, equal and opposite vibrations cancel each other, therefore leaving a certain space near the Sun which is always occupied with the Tattwas of Prana. These Tattwas are being constantly supplied with Prana from the Sun, with the remainder of the Prana passing into the Akashic state. It might be noted here that the whole of this Prana is composed of infinite <u>points</u>. These <u>points</u> will be referred to as Trutis in the future; it could be stated at this point that these Trutis appear on the terrestrial plane as atoms (Anu or Paramanu). They also may be spoken of as solar atoms which are of various classes according to the prevalence of one or more of the constituent Tattwas.

Every point of Prana is a perfect picture of the whole ocean, with every other point being represented in every point: therefore, every atom has all of the four Tattwas in varying proportions for its constituents, according to its position relative to the others. The different classes of these solar atoms appear on the terrestrial plane as the various elements of Chemistry.

The spectrum of every terrestrial element reveals the color of the prevalent Tattwa or Tattwas of a solar atom of that substance. The greater the heat to which any substance is subjected, the nearer the element approaches its solar state, heat destroying for the time being the terrestrial coatings of the solar atoms. The spectrum of sodium thus shows the presence of the yellow of Prithivi; the element Lithium produces the red of Agni and the yellow of Prithivi; the element cesium exhibits the red of Agni, and the green admixture of the yellow of Prithivi and the blue of Vayu. Rubidium illustrates red, orange, yellow, green, and blue, i.e., the Agni, Prithivi and Agni, Prithivi, Vayu and Prithivi, and Vayu. These classes of solar atoms which together make up the expanse of the Solar Prana, pass into the Akashic state. While the Sun maintains a constant supply of these atoms, those that are passing into the Akashic state pass on the other side into the planetary Vayu. Certain measured portions of the Solar Akasha naturally separate themselves from others, according to the differing creation which is to appear in those portions: it is these portions of Akasha which are called Lokas. The Earth itself is a Loka, referred to as the Bhurloka. The Earth will be used for a further illustration of the Law.

That portion of the Solar Akasha which is the immediate mother of the Earth first gives birth to the terrestrial Vayu. Every element is now in the state of the Vayu Tattwa, which may now be called the gaseous state. The Vayu Tattwa is spherical in shape, and thus the gaseous planet bears similar outlines. The center of this gaseous sphere maintains around itself the entire expanse of gas. As soon as this gaseous sphere comes into existence, it is subjected to the following influences, among others:

1. The superimposed influence of the solar heat.
2. The internal influence of the more distant atoms on the nearer ones and vice versa.

The first influence has a double effect upon the gaseous sphere. It imparts more heat to the nearer hemisphere than to the more distant one. The superficial air of the nearer hemisphere rises toward the Sun, after having contracted a certain amount by the action of the solar energy. Cooler air from below now takes its place. But the question remains: where does the superficial air go ? It cannot pass beyond the limit of the terrestrial sphere which is surronded by the Solar Akasha, through which comes a supply from the Solar Prana. Therefore, this superficial air begins to move in a circle, establishing a rotary motion in the sphere. This is taken to be the origin of the Earth's rotation upon its axis.

Again, as a certain amount of the solar energy is imparted to the gaseous terrestrial sphere, the impulse of the upward motion reaches the

center itself. That center, along with the entire sphere, moves toward the Sun. It cannot go on in this direction however, for a closer approach would destroy that balance of forces which gives the Earth its peculiarities. A Loka which is nearer to the Sun than our own planet cannot have the same conditions of Life. Hence, while the Sun draws the Earth toward itself, those Laws of Life which have given it a constitution, keep it in the sphere they have assigned to it. Two forces thus come into existence: drawn by one the Earth would go towards the Sun; checked by the other, it must remain where it is. These are the centrifugal and centripetal forces, and their action results in giving the Earth its annual revolution.

Secondly, the internal action of the gaseous atoms upon each other ends in the change of the entire gaseous sphere with the exception of the upper portion, i.e., that which extends into the Akashic state. This Akashic state gives birth to the igneous (pertaining to the Agni Tattwa) state of terrestrial matter. Similarly, this changes into the Apas, and this again into the Prithivi. The same process occurrs in the changes of matter with which we are familiar. An example will better illustrate the whole Law.

Take ice. This is in a solid state, or what in the Science of Breath would be called the state of Prithivi. As the reader will recall, one quality of the Prithivi Tattwa is cohesive resistance. Now proceed to apply heat to this ice, the temperature of the heat being indicated by a thermometer as it passes into the ice. When the temperature reaches 78 degrees, the ice experiences a change of state. The thermometer no

longer indicates the same temperature of heat: 78 degrees of heat have become latent.

Now proceed to apply a temperature of 536 degrees of heat to a pound of boiling water. As is generally known, this great quantity of heat becomes latent while the water passes into the gaseous state. Now let us proceed to the reverse process. To gaseous water, apply a certain amount of cold. When this cold becomes sufficient to entirely counteract the heat which maintains the water in its gaseous state, the vapor passes into the Akashic state, and from there into the Tejas state. (It is not necessary that the entire volume of vapor should pass <u>at once</u> into the next state; the above principle remains valid through the gradual change of state). As the cold is gradually passing into the vapor, the Tejas modification is gradually appearing out of, and through the intervention of, the Akasha into which it had passed during latency: this is being indicated by the thermometer reading. When the entire volume has passed into the igneous state, and the thermometer has indicated a temperature reading of 536 degrees, the second Akasha comes into existence. From this second Akasha comes the liquid state at the same temperature, all the heat having passed again into the Akashic state; therefore, it is no longer indicated by the thermometer.

When cold is applied to this liquid, heat again is liberated. When it reaches a temperature of 78 degrees, it is heat which has come out of and through the Akasha into which it had originally passed, showing that the entire volume of liquid has passed into the igneous state. Here it again begins to pass into the Akashic state. The thermometer begins to

drop in temperature reading, and out of this Akasha comes the Prithivi state of water: ice. Thus we see that the heat which is given out by the influence of cold passes into the Akashic state, which becomes the substratum of a higher phase. We also see that the heat which is absorbed passes into another Akashic state which becomes the substratum of a lower phase.

It is in this way that the terrestrial gaseous sphere changes into its present state. The experiment described above points out many important truths about the relationship of these Tattwas to each other. First of all, it explains the very important assertion of the Science of Breath which states that every succeeding Tattwic state has the qualities of all the foregoing Tattwic states. Thus, we see that as the gaseous state of water is being acted upon by cold, the latent heat of steam is being cancelled, and is passing into the Akashic state. This can only be the case, since equal and opposite vibrations of the same force always cancel each other, the result being the Akasha. Out of this comes the Tejas state of matter, in which the latent heat of steam becomes patent. It will be observed that this state has no permanence; the Tejas state of water (or the Tejas state of any substance) cannot exist for any length of time. This is its condition since the major part of terrestrial matter is in the lower, and therefore more negative states of Apas and Prithivi. In consequence, whenever any substance enters into the Tejas state, the surrounding objects begin to react upon it at once with such strength as to force it at once into the next Akashic state. Those things which now live in the normal state of Apas or Prithivi find

it against the laws of their existence to remain, except under external influence, in the Tejas (igneous) state. Thus, an atom of gaseous water has already remained in the three states of the Akashic, the gaseous, and the Tejas prior to its passing into the liquid state. Therefore, it must have all the qualities of the three Tattwas, and so it no doubt has. Cohesive resistance is only wanted, and that is the quality of the third Prithivi Tattwa.

When this atom of liquid water passes into the ice state, what then do we see ? All the preceding states must again show themselves. Cold will cancel the latent heat of the liquid state, and the Akashic state will be liberated. Out of this Akashic state will proceed the gaseous. This gascous (Vayava) state is evidenced by the gyrations and other motions set up in the body of the liquid by the application of the cold. The motion however, is not very long in duration; and as they are ceasing (passing into the Akashic state), the Tejas state is appearing. This too however, is not long in duration; as it passes into the Akashic state, the ice is coming into existence.

It is easy to see that all the four states of terrestrial matter exist in our sphere. The gaseous (Vayava) is present in our atmosphere; the igneous (Tejas) is found in the normal temperature of Earth life; the liquid (Apas) is found in the ocean; the solid (Parathiva) is the terra firma. None of these states however, exists isolated from the other: each is constantly invading the domain of the other, and thus it is difficult to find any portion of space occupied by matter in only one state. The two adjacent Tattwas are found intermixed with each other to

a greater extent than those that are removed from each other by an intermediate state. Thus, Prithivi will be found mixed to a greater extent with water, than with Agni and Vayu; Apas with Agni more so than with Vayu; Vayu with Agni, more so than with any other. Thus, according to the Science of the Tattwa, it would appear from the above that the flame and other luminous bodies on Earth are not in the terrestrial Tejas (igneous) state: they are in, or near the solar state of matter.